

CCITT X.3 SUMMARY		
PARAMETER NUMBER	PARAMETER	DYNATECH VALUES
1	PAD Recall Defined Character	0 or 1 32 - 126
2	Local Echo	0 or 1
3	Data Forwarding Characters	0,1, 2, 4, 6, 8,16, 18, 32, 64,126, 127 + n
4	Data Forwarding Timeout	0 - 255
5	PAD to Terminal Flow Control	0 - 4
6	Control of PAD Service Signals	0,1,4,5, 8 - 15
7	PAD Action on Receipt of Break from Terminal	0,1,2, 4, 5, 8, 16, 21
8	Discard Output	0 or 1
9	Padding after Carriage Return	0 - 255
10	Line Folding	0 - 255
11	Async Speed (Read Only Parameter)	0 - 18
12	Terminal to PAD Flow Control	0,1,
13	Line Feed Insertion	0, 1, 2, 4 - 7
14	Padding after Line Feed	0 - 255
15	Editing	0 or 1
16	Character Delete Defined Character	0 - 127
17	Buffer Delete Defined Character	0 - 127
18	Buffer Display Defined Character	0 - 127
19	Editing Service Signals	0, 1, 2, 8, 32-126
20	Echo Mask	0 - 128+
21	Parity Treatment	0,1, 2, 3
22	Page Wait	0 - 255

DIAGNOSTIC CAUSE TABLE		
DIAGNOSTIC CODE		MEANING
DECIMAL	HEX	
0	00	No Additional Information
1	01	Invalid P(S)
2	02	Invalid P(R)
15	0F	
16	10	Packet Type Invalid
17	11	Packet Type Invalid for State R1
18	12	Packet Type Invalid for State R2
19	13	Packet Type Invalid for State R3
20	14	Packet Type Invalid for State P1
21	15	Packet Type Invalid for State P2
22	16	Packet Type Invalid for State P3
23	17	Packet Type Invalid for State P4
24	18	Packet Type Invalid for State P5
25	19	Packet Type Invalid for State P6
26	1A	Packet Type Invalid for State P7
27	1B	Packet Type Invalid for State D1
28	1C	Packet Type Invalid for State D2
29	1D	Packet Type Invalid for State D3
31	1F	
32	20	Packet Not Allowed
33	21	Unidentifiable Packet
34	22	Call on One-Way Logical Channel
35	23	Invalid Packet Type on PVC
36	24	Packet on Unassigned Logical Channel

DIAGNOSTIC CAUSE TABLE		
Continued		
DIAGNOSTIC CODE		MEANING
DECIMAL	HEX	
37	25	Reject not Subscribed to
38	26	Packet too Short
39	27	Packet too Long
40	28	Invalid GFI
41	29	Restart or Registration Packet with Non-Zero in Bits 1 to 4 of Octet1, or Bits 1 to 8 of Octet 2
42	2A	Packet Type Not Compatible with Facility
43	2B	Unauthorized Interrupt Confirmation
44	2C	Unauthorized Interrupt
45	2D	Unauthorized Reject
47	2F	
48	30	Time Expired
49	31	Incoming Call
50	32	Clear Indication
51	33	Reset Indication
52	34	Restart Indication
63	3F	
64	40	Call Setup, Call Clearing or Registration Problem
65	41	Facility/Registration Code Not Allowed
66	42	Facility Parameter Not Allowed
67	43	Invalid Called Address
68	44	Invalid Calling Address
69	45	Invalid Facility/Registration Length
70	46	Incoming Call Barred
71	47	No Logical Channel Available
72	48	Call Collision
73	49	Duplicate Facility Request
74	4A	Non-Zero Address Length
75	4B	Non-Zero Facility Length
76	4C	Facility Not Provided when Expected
77	4D	Invalid CCITT-Specified DTE Facility
79	4F	
80	50	Miscellaneous
81	51	Improper Cause Code from DTE
82	52	Non Aligned Octet
83	53	Inconsistent Q Bit Setting
95	5F	
96	60	Not Assigned
111	6F	
112	70	International Problems
113	71	Remote Network Problems
114	72	International Protocol Problems
115	73	International Link Out of Order
116	74	International Link Busy
117	75	Transit Network Facility Problem
118	76	Remote Network Facility Problem
119	77	International Routing Problem
120	78	Temporary Routing Problem
121	79	Unknown Called DNIC
122	7A	Maintenance Action
128	80	Reserved for Network Specific Diagnostic Information
255	FF	

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X.25

Packet Switching Primer

LINK LEVEL
(Level 2)

FRAME STRUCTURE					
FLAG	ADDRESS FIELD	CONTROL FIELD	INFORMATION FIELD	FRAME CHECK SEQUENCE	FLAG
F	A 8-BITS	C 8-BITS	I N-BITS	FCS 16-BITS	F
01111110					01111110

[illegible][illegible][illegible]

F1	DIAGNOSTIC CODE	DIAGNOSTIC EXPLANATION UP TO 3 OCTETS
23	USER DATA FIELD UP TO 32 OCTETS	

VARIABLE LENGTHS		8-BITS	
0 THRU F	BCD	8	7 6 5 4 3 2 1

FACILITY CODE CLASSES		
CLASS	FACILITY CODE ONE OCTET	PARAM. LENGTH PARAMETER FIELD
A	00 — 3F	1 OCTET
B	40 — 7F	2 OCTETS
C	80 — BF	3 OCTET
D	C0 — FF	1 OCTET More than 3 OCTETS

Closed User Group with Outgoing Access Selection	<ul style="list-style-type: none"> ■ Basic Format ■ Extended Format
Bilateral Closed User Group Selection	
Reverse Charging	
Fast Select	
NUI Selection	
Charging Information	<ul style="list-style-type: none"> ■ Requesting Service ■ Receiving Information <ul style="list-style-type: none"> a) Monetary Unit b) Distance c) Segment Count

09	Remote DTE Operational (PVC)	DTO
0F	Network Operation (PVC)	NO
11	Incompatible Destination	ICD

FACILITY TYPE	FACILITY FIELD
Flow Control Parameter Negotiation	<ul style="list-style-type: none"> ■ Packet Size ■ Window Size
Throughput Class Negotiation	
Closed User Group Selection	<ul style="list-style-type: none"> ■ Basic Format ■ Extended Format
Closed User Group with Outgoing Access Selection	<ul style="list-style-type: none"> ■ Basic Format ■ Extended Format
Bilateral Closed User Group Selection	
Reverse Charging	
Fast Select	
NUI Selection	
Charging Information	
Requesting Service	
Receiving Information	
<ul style="list-style-type: none"> a) Monetary Unit b) Distance c) Segment Count d) Call Duration 	
RPOA Selection	
<ul style="list-style-type: none"> ■ Basic Format ■ Extended Format 	
Call Redirection Notification	
Called Line Address Modified Notification	
Transt Delay Selection and Indication	
National Options Marker	

CCITT X.29 SUMMARY

	8	7	6	5	4	3	2	1	
SET	P(R)	M	P(S)	0	02	PARMS & VALUES			
SET & READ	P(R)	M	P(S)	0	06	PARMS & VALUES			
PARAMETER INDICATION	P(R)	M	P(S)	0	00	PARMS & VALUES			
READ	P(R)	M	P(S)	0	04	PARMS & VALUES			
INVITATION TO CLEAR	P(R)	M	P(S)	0	01				
RESELECTION	P(R)	M	P(S)	0	07	DATA FIELD	8-BITS	8-BITS	8-BITS
ERROR	P(R)	M	P(S)	0	05	ERROR TYPE	ERROR CODE		
INDICATION OF BREAK	P(R)	M	P(S)	0	03	PARA-METER REFER-VALUE	8-BITS	8-BITS	8-BITS